

State Compendium - Region 2

Programs and Regulatory Activities Related to Animal Feeding Operations

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CHAPTER 1. INTRODUCTION

This compendium has been developed to support the U.S. Environmental Protection Agency's (EPA) efforts to address the environmental and public health problems associated with animal feeding operations (AFOs) and concentrated animal feeding operations (CAFOs). The compendium is a compilation of AFO-related state program and state initiative information intended to illustrate how states are regulating AFOs, with a specific focus on the use of permits or similar mechanisms. This document is not intended as an evaluation of the effectiveness of individual state efforts.

Most of the State programmatic and regulatory information gathered and presented in this document pertains to controlling water quality impacts from AFOs. Although some states have designed regulatory standards to control non-water quality impacts (e.g., setback requirements for odor control), the vast majority of information presented is based on state efforts to address water quality and nutrient management issues.

The *Compendium* has been compiled from a number of publicly available information sources, including:

- Previously published research and existing surveys of State AFO and CAFO programs
- World Wide Web pages of state governments, agencies, and national agriculture organizations
- Select publicly accessible state statutes and regulations (generally accessed via the Web)
- National Pollutant Discharge Elimination System (NPDES) permits developed for CAFOs
- Summaries of State program information provided by EPA regional offices

Based on these sources of publicly available information, the *Compendium* represents a reasonable appraisal of how states are addressing AFO-related environmental problems. Nevertheless, the information presented here is subject to several important limits. First, in compiling this compendium no new formal survey of the states was conducted, nor was a comprehensive review of each state's regulations undertaken, as both were beyond the scope of this task. Thus, in some instances information presented here may be limited or minor gaps may exist. Second, state regulation of AFOs and CAFOs can be complex, involving both federal and state laws and regulations, often originating at the state level from several different agencies, with numerous variations in approaches, requirements, and jurisdiction among the different states. Consequently, different levels of information may be available among states and even between relevant agencies within a state. Finally, the various sources of publicly available information used were reviewed and compiled over a period of time during which many States were reexamining and revising their AFO regulations. As a result, this compendium is by necessity a working document that depicts reasonably current practices, but may in some instances be superseded by recent state programmatic and regulatory changes. The information presented here must be considered subject to these limits and specific regulatory requirements should be verified with state or EPA authorities as appropriate.

The *Compendium of State AFO Programs* consists of four chapters, including this introduction, and three Appendices. Chapter 2 of this document provides a national overview of State AFO initiatives based on the publicly available data. It attempts to summarize how states regulate

AFOs and highlights key aspects of State AFO programs.

Chapter 3 presents individual state profiles. Each profile includes available information addressing: background, lead regulatory agency, state regulations regarding AFO/CAFOs, types of permits, permit coverage, permit conditions, enforcement information, state voluntary programs, additional state-specific information, and references.

Finally, the *Compendium* contains three Appendices. Appendix A describe methods used to develop the *Compendium* and highlights the limits of the data collection efforts. Appendix B lists some of the more frequently used acronyms. Appendix C provides a glossary of useful terms associated with animal feedlots.

CHAPTER 2. NATIONAL SUMMARY OF STATE INITIATIVES

This chapter presents a national overview of state AFO regulatory programs and initiatives based on a review of publicly available data. The discussion begins with a brief review of the respective federal and state roles in administering the National Pollutant Discharge Elimination System (NPDES) program (Section 2.1), followed by a summary of the federal regulations addressing AFOs and CAFOs (Section 2.2). The remainder of this chapter summarizes State Programs/Initiatives (Section 2.3) and Recent State Initiatives/Trends (Section 2.4).

2.1 Overview of EPA/State Roles in NPDES Program

Under the Clean Water Act (CWA), NPDES permits may be issued by EPA or any state authorized by EPA to implement the NPDES program. Currently, 44 states are authorized to administer the base NPDES program.¹ (The base program includes the federal requirements applicable to AFOs and CAFOs, which are discussed below).² To become an authorized NPDES state, the requirements imposed under a State's NPDES program must at a minimum be as stringent as the requirements imposed under the federal NPDES program. The states, however, may impose requirements that are broader in scope or more stringent than the requirements imposed under the federal NPDES program. In states not authorized to implement the NPDES program, the appropriate EPA Regional office is responsible for implementing the NPDES program.

Regarding the regulation of AFOs, 44 of the states authorized to implement the NPDES program have some form of program requirements generally deemed to be as stringent as the federal requirements applicable to AFOs. Yet, it appears that only a handful of states rely solely on their State NPDES regulations to address CAFOs. Rather, most use their NPDES regulations as one part of their CAFO program and supplement these requirements with additional provisions.

Because the federal CAFO regulations constitute the core program requirements in many authorized states and are used for purposes of comparison and summary in this document, these regulations are briefly summarized below.

2.2 Overview of EPA AFO/CAFO Definitions and Effluent Limits, Under the Federal NPDES Program

Under the federal NPDES program, EPA has developed regulations that define which facilities constitute AFOs and which constitute CAFOs. Under these regulations, facilities that constitute CAFOs are defined as point sources for purposes of the NPDES program. No facility may discharge pollutants from a point source to waters of the United States without a NPDES permit.

¹ State NPDES authorization may be obtained for the base program, as well as for components addressing federal facilities, pretreatment, general permits, and sludge. The Virgin Islands is also authorized to administer the NPDES program.

² Alaska, Arizona, Idaho, Massachusetts, New Hampshire, and New Mexico are not authorized to implement the NPDES program. Oklahoma is delegated to implement the NPDES program, however; Oklahoma does not issue a general NPDES permit specifically for CAFOs and is in effect unauthorized to administer the CAFO portion of the NPDES program. Oklahoma CAFOs should apply for coverage under the general NPDES CAFO permit issued by U.S. EPA Region 6 (See 63 FR 53002).

The existing federal regulatory definitions of AFOs and CAFOs are provided at 40 *C.F.R.* § 122.23 and Part 122, Appendix B. These regulations define an AFO as a facility that meets the following criteria:

- Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.
- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.³

Federal regulations define a CAFO generally as an animal feeding operation that:

- Confines more than 1,000 animal units (AUs)⁴, or
- Confines between 301 to 1,000 AUs and discharges pollutants:
 - ▶ Into waters of the United States through a man-made ditch, flushing system, or similar man-made device, or
 - ▶ Directly into waters of the United States that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

The CAFO regulatory definition also provides that facilities that discharge pollutants only in the event of a 25-year, 24-hour storm event are not defined as CAFOs.

Under existing federal regulations, the permitting authority (e.g., EPA or an authorized state) can designate an AFO as a CAFO upon determining that the operation is a significant contributor of pollution to waters of the United States. This determination, which takes a number of factors into account (e.g., slope, vegetation, and the proximity of the operation to surface waters), is based on an onsite inspection by the agency that issues the permits and is subject to certain discharge conditions.

In addition to the provisions that define AFOs and CAFOs, EPA has promulgated an effluent limitation guideline (ELG) applicable to feedlots (feedlots are defined in the same manner as CAFOs) (see 40 *C.F.R.* § 412). This regulation generally establishes that CAFOs are subject to a zero discharge standard except for discharges, resulting from a catastrophic or chronic storm event, that occur from a properly maintained and operated waste management system designed to control waste and runoff from a 25-year, 24-hour storm.

2.3 State Programs/Initiatives

³ 40 *CFR* 122.23 (b)(1).

⁴ The following examples are animal quantities equivalent to 1,000 animal units: 1,000 slaughter and feeder cattle, 700 mature dairy cattle, 2,500 swine each weighing more than 25 kilograms, 30,000 laying hens or broilers (if a facility uses a liquid manure system), and 100,000 laying hens or broilers (if a facility uses continuous overflow watering). See 40 *CFR* Part 122, Appendix B.

The national summary of state programs and initiatives is divided into four categories: (1) regulatory programs used by states, (2) State definitions of CAFO/AFO, (3) use of general versus individual permits, and (4) key permit conditions.

2.3.1 Regulatory Approach

Figure 1 provides a state-by-state depiction of the AFO permitting mechanisms available in each state. States have five categories of permitting mechanisms:

- Federally Administered NPDES Program
- Federally Administered NPDES Program and State Administered Non-NPDES Program
- State Administered NPDES Program only
- State Administered NPDES Program and State Administered Non-NPDES Program
- State Administered Non-NPDES Program only

As discussed above, 44 states are authorized to implement the base NPDES CAFO program. As illustrated in Figure 1 and summarized in Table 1, of the 44 states authorized to implement the NPDES CAFO program:

- Thirty-two states administer a State NPDES CAFO program in combination with some other state permit, license, or authorization program. Typically, this additional State authorization is a construction or operating permit.
- Seven states regulate CAFOs exclusively under their state NPDES authority (HI, NJ, NV, NY, RI, TN, WV).
- six states have chosen to solely regulate CAFOs under State non-NPDES programs (CO, MI, NC, OR, SC, VA).

Of the six states not authorized to administer the NPDES program:

- Three rely solely on federal NPDES permits to address CAFOs (AK, MA, NH).
- Three impose some form of a state non-NPDES program requirement, although EPA remains responsible for administering the NPDES CAFO requirements in these states (AZ, ID, NM).

While Oklahoma is one of the 44 NPDES-delegated states, Oklahoma does not have a general NPDES permit specific to CAFOs. In this special case, Region 6 administers the portion of Oklahoma's NPDES program that deals with CAFOs by covering Oklahoma CAFOs under the Region 6 general NPDES permit for CAFOs. Oklahoma also uses a State non-NPDES operating permit to regulate state CAFOs.

Overall, 28 states have a combination of permitting mechanisms available for addressing environmental impacts from AFOs. Eleven states exclusively regulate CAFOs under a state or federal NPDES program. Five states (CO, MI, NC, SC and OR) only regulate AFOs under a

state non-NPDES program, with Colorado and Michigan not requiring any AFOs to obtain any form of operating permit.

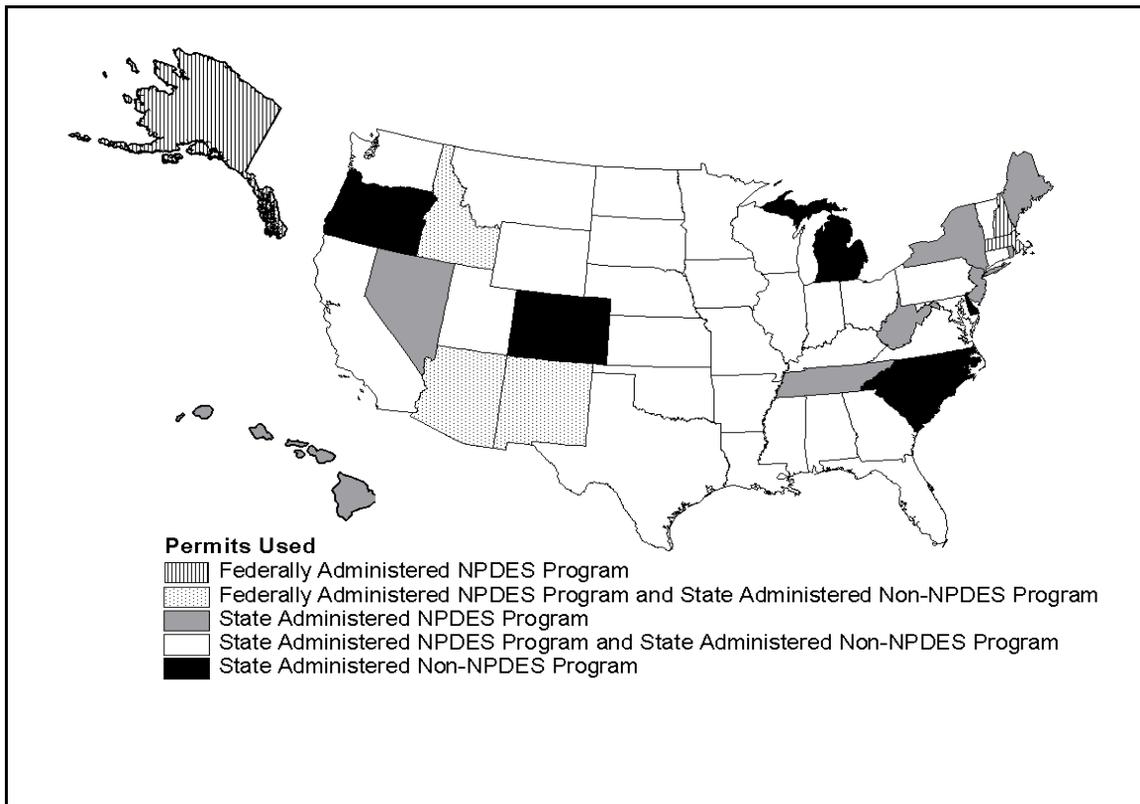


Figure 1. Regulatory Mechanisms for AFO Permitting in Each State

2.3.2 State Definitions of CAFO

EPA and state definitions of a CAFO are important because the definitions determine the scope of the existing federal and state regulatory programs. EPA's definition of a CAFO is based on the length of time animals are confined, the number of animals confined (animal units), and whether or not the facility directly discharges pollutants into waters of the United States. Virtually all state NPDES CAFO programs use the federal definition for CAFO. The vast majority of states also use the federal definition of CAFO for State non-NPDES CAFO programs. Several states, however, use a lower numeric threshold (number of animal units) for non-NPDES permitting. For example, Minnesota issues individual NPDES permits to confined feeding operations as defined by federal regulation and State feedlot permits (non-NPDES) to facilities with more than 10 animal units (calculated by using the formula used in the federal definition).

States that use the federal definition of CAFO may also increase the scope of coverage required through state NPDES programs by reducing the number of animals (number of animal units) a facility can confine before being subject to permitting.

Table 1. Identification of Permit Type and Permit Requirements Within State AFO Programs in the United States¹

State	State NPDES	State Control Mechanism ² (non-NPDES)		General/ Individual Permits				Permit Conditions ³			
		Construction	Operating	NPDES		State non-NPDES		Effluent ⁴	Management	Land Application	
				General	Individual	General	Individual			Agronomic Rates	Offsite
AL	✓	✓	✓	✓	✓			✓	✓	✓	
AK	ND ⁵										
AR	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
AZ	ND		✓	✓		✓				✓	
CA	✓	✓	✓	✓		✓	✓	✓		✓	
CO	*	✓	✓				✓	✓	✓	✓	
CT	✓	✓			✓		✓	✓	✓	✓	
DE	✓		✓						✓		
FL	✓	✓	✓		✓			✓	✓	✓	
GA	✓		✓	✓	✓		✓		✓	✓	
HI	✓				✓						
IA	✓	✓	✓		✓		✓	✓	✓	✓	✓
ID	ND	✓	✓	✓			✓	✓	✓	✓	✓
IL	✓	✓	✓	✓	✓		✓	✓	✓	✓	
IN	✓	✓	✓		✓				✓	✓	
KY	✓	✓	✓			✓	✓	✓	✓	✓	✓
KS	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓

Information contained on this page is subject to the limitations described on page one of chapter one of this document.

Table 1. Identification of Permit Type and Permit Requirements Within State AFO Programs in the United States¹

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		Construction	Operating	NPDES		State non-NPDES		Effluent ⁴	Management	Land Application	
				General	Individual	General	Individual			Agronomic Rates	Offsite
LA	✓		✓		✓		✓	✓	✓		
MA	ND										
MD	✓	✓	✓	✓	✓		✓	✓	✓	✓	
ME	✓		✓		✓			✓	✓	✓	✓
MI	*										
MN	✓	✓	✓		✓		✓	✓	✓	✓	
MO	✓	✓	✓	✓	✓		✓	✓	✓	✓	
MS	✓		✓	✓	✓	✓	✓	✓			
MT	✓	✓	✓	✓	✓	✓	✓	✓		✓	
NE	✓	✓	✓		✓		✓	✓	✓	✓	
NC	*		✓			✓	✓	✓	✓	✓	
ND	✓	✓	✓		✓		✓	✓	✓	✓	
NH	ND										
NJ	✓				✓					✓	
NM	ND		✓				✓		✓	✓	
NV	✓				✓						
NY	✓			✓	✓			✓	✓	✓	

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State	State NPDES	State Control Mechanism ² (non-NPDES)		General/ Individual Permits				Permit Conditions ³			
		Construction	Operating	NPDES		State non-NPDES		Effluent ⁴	Management	Land Application	
				General	Individual	General	Individual			Agronomic Rates	Offsite
OH	✓	✓	✓	✓	✓		✓	✓	✓		
OK	✓	✓	✓	✓	✓		✓	✓	✓		
OR	*	✓	✓			✓	✓			✓	
PA	✓		✓	✓	✓			✓	✓	✓	✓
RI	✓				✓						
SC	*	✓	✓			✓	✓	✓	✓	✓	
SD	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
TN	✓			✓	✓			✓	✓	✓	
TX	✓		✓	✓	✓		✓	✓	✓	✓	
UT	✓	✓	✓	✓	✓		✓		✓		
VA	✓		✓			✓	✓	✓	✓	✓	
VT	✓	✓					✓	✓	✓	✓	
WA	✓		✓	✓	✓	✓	✓	✓	✓	✓	
WI	✓	✓	✓	✓	✓			✓	✓	✓	
WV	✓							✓	✓	✓	
WY	✓	✓			✓		✓	✓	✓	✓	
Totals	38	27	36	20	32	12	31	35	38	40	8

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Table 1. Identification of Permit Type and Permit Requirements Within State AFO Programs in the United States¹

State	State NPDES	State Control Mechanism ² (non-NPDES)		General/ Individual Permits				Permit Conditions ³			
		Construction	Operating	NPDES		State non-NPDES		Effluent ⁴	Management	Land Application	
				General	Individual	General	Individual			Agronomic Rates	Offsite

¹ Blank data cells indicate that the program element was not a primary component of the state program or information was not sufficient to make a determination.

² State control mechanisms include all forms of formal state approval required to construct or operate an AFO, such as state issued non-NPDES permits, letters of approval, and certificates of coverage.

³ Permit conditions are requirements imposed through either NPDES or state non-NPDES programs.

⁴ Effluent limits refer to whether or not a state imposes federal effluent limits to AFOs/CAFOs (i.e., no discharge allowed except during 25 year, 24- hour storms). A check could indicate that a state imposes effluent limits that are more strict than the federal requirements (e.g., Arkansas does not allow any discharges regardless of storm events).

⁵ ND = States not authorized to administer the NPDES program.

* Although authorized to administer the NPDES program, the state chooses to use a separate program to address AFOs.

Some states have unique definitions for their livestock regulatory programs that do not follow the federal definition (See Table 2). States typically base their definition on number of animals confined, weight of animals and design capacity of waste control system, or gross income of agricultural operation. These definitions are exclusively applied to State non-NPDES programs.

Table 2. Selected State CAFO Definitions that Differ from the EPA Definition and Use of the Definition in Regulatory Control

State	Classification Scheme	Facilities Subject to State Non-NPDES Regulatory
Indiana	Number of animals	Operation with 600 swine, 300 cattle, or 30,000 birds
Iowa	Weight of animals in a confinement feeding operation	Permitting threshold for construction permit based on type of waste control system and design capacity (based on weight) of that system (e.g., an anaerobic lagoon with a design capacity of 400,000 lbs of bovine requires construction permits)
Kansas	Number of animals	Operations with 300 animal units
Maryland	Gross income and animal units	All agricultural operations with incomes of at least \$2,500 or eight animal units
North Carolina	Number of animals	Operations designed for 100 head of cattle, 75 horses, 250 swine, 1,000 sheep, or 30,000 birds

One important difference between state livestock regulatory programs and the federal program is that numerous states have addressed the issue of authority to issue permits (or other control mechanisms) to CAFOs by requiring that all or a specified subgroup of CAFOs regardless of whether they have a direct point source discharge of pollutants to U.S. waters obtain a permit.⁵ This requirement is imposed under state, not federal regulations.

For example, Arkansas requires all AFOs that use a liquid waste management system to obtain permit coverage under either the State-issued general permit or an individual permit. AFOs with dry waste management systems are not automatically required to obtain a permit; however, all facilities with more than 1,000 animal units are subject to coverage under the State’s general permit. This is an important distinction because states have opted to expand the scope of facilities that fall within the definition of a CAFO by eliminating the requirement that a facility must have a discharge before being considered a CAFO. In other words, states are requiring large facilities with a potential to discharge to abide by CAFO rules.

2.3.3 General/Individual Permits

The regulation of CAFOs is challenging, in part, because of the large number of facilities across the country. In 1995 it was estimated that 450,000 operations nationwide confined or concentrated animals, of which a very conservative estimate indicated that at least 6,600 had

⁵ Preliminary data indicate that the following states require all or a subset of CAFOs (under various definitions) to obtain permits: AL, AR, AZ, CO, DE, IA, ID, IN, KS, KY, MN, MS, NC, OH, OR, SC, WY.

more than 1,000 animal units and may have been considered CAFOs under the federal definition⁶. More recent estimates describe an AFO universe of approximately 375,700 operations of which approximately 12,600 are AFO operations with more than 1,000 AUs, 26,500 are AFO operations with 300-1,000 AUs, and 336,600 are AFO operations with fewer than 300 AUs.⁷ One way of reducing the administrative burden associated with permitting such large numbers of facilities is through general permits. Existing regulations provide that general permits may be issued to cover a category of discharges within a geographic region. Within such areas, general permits may regulate either storm water point sources or a category of point sources that involves similar operations with similar wastes. Operations subject to the same effluent limitations and operating conditions, and requiring similar monitoring, are most appropriately regulated under a general permit. EPA and the states are using general permits to regulate CAFOs, and this trend appears to be increasing. South Dakota, for example, has established two general permits for CAFOs, one to address swine operations and another for all other livestock.

Of the 44 states authorized to implement the NPDES program:

- Twenty have issued a State NPDES general permit for CAFOs (this number excludes federally issued general permits).
- Twelve have issued a state non-NPDES general permit for CAFOs.

Of the six states not authorized to administer the NPDES program (this excludes Oklahoma), four are subject to a federal general permit.⁸

2.3.4 Permit Conditions

Normally, a NPDES permit will include several types of permit conditions, including technology-based effluent limits (i.e., zero discharge except for discharges resulting from chronic or catastrophic rainfall events if a facility is designed to hold process wastewater and runoff from a 25-year, 24-hour storm for CAFOs subject to § 412), water quality-based effluent limits (if the technology-based limit will not ensure compliance with State water quality standards), monitoring and reporting conditions, special conditions (e.g., conditions that impose additional controls beyond numeric limits, such as best management practices [BMPs]), and standard conditions (e.g., duty to comply, duty to ensure proper operation, and duty to provide information).

The federal technology-based effluent limit for CAFOs is “no discharge.” The effluent limit includes an exception in the event of chronic or catastrophic rain for facilities that have been

⁶ *Animal Agriculture: Information on Waste Management and Water Quality Issues*, General Accounting Office, 1995.

⁷ 66 *FR* 2985, January 12, 2001.

⁸ CAFOs in New Mexico and Oklahoma are subject to an EPA Region 6 general permit; facilities in Idaho and Alaska are subject to an EPA Region 10 permit, although no facilities are covered under a NPDES permit in Alaska; and CAFOs in Arizona are subject to an EPA Region 9 general permit, although no facilities are covered under the general permit. New Hampshire, and Massachusetts are located in EPA Region 1, which does not have a general NPDES permit for CAFOs.

designed, constructed, and operated to contain all waste water and runoff from a 25-year, 24-hour storm. States not authorized to implement the NPDES program must use this federal effluent limit.

Authorized states generally are equally as stringent, but may be more stringent. Based on a review of available data, of the 44 states authorized to implement the NPDES program 34 use the federal effluent limitation guideline and 6 use a more stringent limit.

Some states with more stringent effluent limits may partially or totally prohibit discharges related to storm events. In Arkansas, for example, the effluent limit prohibits discharges from liquid waste management systems, including periods of precipitation greater than the 25-year, 24-hour storm event. California requires no discharges from new waste control structures even during 100-year storms. And in Iowa, confinement feeding operations (i.e., roofed AFOs) are prohibited from any direct discharge and must dispose of manure in a manner that will not cause a pollution of surface or ground water.

A key concern regarding the management of CAFO waste is ensuring appropriate land application. Land application is the primary management practice used by CAFOs to dispose of animal waste. Several estimates indicate that 90 percent of CAFO-generated waste is land applied. Where properly done, land application of CAFO waste fosters the reuse of the nitrogen, phosphorus, and potassium in these wastes for crop growth. However, where such wastes are excessively or improperly applied, land application can contribute to water quality impairment. Thirty-four states impose requirements addressing land application either through NPDES or non-NPDES programs. Typical requirements include that CAFO waste be applied at agronomic rates and that CAFO operators develop Waste Management Plans.

The breakout of state requirements is as follows:

- Forty states require that CAFO waste be land applied at agronomic rates.
- Thirty-eight states require the development and use of Waste Management Plans.
- One state, Georgia, issues land application system (LAS) permits.

Agronomic rates are typically based on the nitrogen needs of crops, although some states specify that waste be applied at agronomic rates for nitrogen and phosphorous. The determination of agronomic rates varies from state to state. Some states do not address how agronomic rates should be determined, while others, such as Colorado, require CAFO operators to complete detailed plans and field sampling to determine the appropriate amount of waste that can be land applied.

The complexity and details required in a waste management plan also vary among states. Some states do not explicitly identify what items must be addressed in a waste management plan, whereas others have detailed requirements. Typically, CAFO operators are required to address these items in a waste management plan:

- Estimates of the annual volume of waste.
- Schedules for emptying and applying wastes.
- Rates and locations for applying wastes.
- Provisions for determining agronomic rates (i.e., soil testing).

- Provisions for conducting required monitoring and reporting.
- Written agreements with landowners to accept liquid waste.

2.4 Recent State Initiatives/Trends

One clear indication that states have an increasing interest in expanding their efforts to control water quality impacts from AFOs is the promulgation of new state AFO laws, regulations and program initiatives. At least 28 states have developed new laws or regulations related to AFOs since 1996. For example, Kansas, Kentucky, North Carolina, and Wyoming passed legislation regarding swine facilities, with Kentucky and North Carolina imposing moratoriums on the expansion of swine AFOs until state management/regulatory plans could be developed. Mississippi also has imposed a 2-year moratorium on any new CAFOs.

Alabama's recent efforts include developing an NPDES general permitting rule and a Memorandum of Agreement outlining state agency responsibilities as they relate to AFOs. Washington's Dairy Law subjects all dairy farms with more than 300 animal units to permitting and requires each facility to develop NRCS-approved nutrient management plans. Indiana's Confined Feeding Control Law also requires AFOs to develop waste management plans and receive state approval for operating AFOs.

2.5 Summary

State efforts to manage AFOs are carried out through issuance of NPDES permits and state issued non-NPDES permits and/or authorizations. State AFO regulatory programs are directed in large part at controlling the potential environmental impacts on surface water, but also at protecting ground water and managing industry growth. State permits and/or authorization requirements are often imposed regardless of NPDES requirements. State non-NPDES AFO programs are often more stringent than NPDES programs and state efforts often extend coverage to smaller classes of AFOs. Further, the implementation of state non-NPDES programs often receives more agency attention than the implementation of NPDES programs, with several states actively choosing not to use NPDES permits.

While specific state efforts relating to AFOs vary, most states regulate facilities through permitting programs that require animal waste disposal systems to be constructed to prevent the discharge of animal wastes to waters of the United States. Coverage under state permitting programs depends on such criteria as facility size, potential for discharge, type of facility, and type of waste control. Information indicates that state agencies are increasing their commitment of resources to address environmental concerns from AFOs.

CHAPTER 3. STATE PROFILES

This chapter presents individual profiles of state programmatic and regulatory efforts addressing AFOs for each of the 50 states. These profiles provide a state-by-state summary of the key elements within State AFO regulatory programs. The profiles summarize existing State activities to address environmental and health impacts from AFOs. The profiles provide a comprehensive overview of each State program, including the following:

- A description of the lead regulatory agency(ies) (i.e., permitting authority) and agency(ies) responsible for directing voluntary programs.
- State regulations that address AFOs and voluntary programs that encourage regulatory compliance or the use of best management practices.
- The types of permits issued and the permitting processes for each state, the circumstances for which permits are required (i.e., permit coverage), and the requirements and responsibilities of AFO owners and operators (i.e., permit conditions).
- State enforcement activities, inspection programs, and staffing and funding levels dedicated to addressing AFOs.
- Examples of innovative or interesting state projects or programs to control the potential negative environmental impacts of AFOs.

If information on a particular program element was not readily available, or not identified, the following phrase was used: “no information was found in publicly available sources.” Figure 3.1 presents the outline used for each of the state profiles.

1.0	Background
2.0	Lead Regulatory Agency
3.0	State Regulations Regarding AFOs/CAFOs
4.0	Type of Permits <i>NPDES</i> <i>Other (general use or general agriculture permits, construction permits, and operating permits)</i>
5.0	Permit Coverage (potential nuisance and/or location)
6.0	Permit Conditions <i>Approvals (permits, letters of intent, or certificates of coverage)</i> <i>Lagoon Design and Specifications (seepage limits, etc.)</i> <i>Discharge Rules</i> <i>Waste Management Plans</i> <i>Separation Distances</i> <i>Land Application Requirements</i> <i>Other Requirements</i>
7.0	Enforcement Information <i>General Enforcement Information</i> <i>General Inspection Information</i>
8.0	Voluntary Programs
9.0	Additional State-Specific Information <i>Cooperative Extension Service</i> <i>Comprehensive Nutrient Management Plan (CNMP)</i> <i>Memorandums of Understanding/Agreement (MOUs/MOAs)</i> <i>Other Information</i>
10.0	References

Figure 3.1 Outline for Profiles of State Programs and Regulatory Activities Related to Animal Feeding Operations

New Jersey's CAFO Program

1.0 Background

Based on information provided to EPA by USDA it is estimated that there are 15 AFOs with from 300 to 1,000 animal units and 6 AFOs with more than 1,000 animal units in New Jersey. These are primarily in the dairy livestock sector (USDA, 1999; USDA, 2000).

2.0 Lead Regulatory Agency

New Jersey Department of Environmental Protection is the lead regulatory agency regarding CAFOs. Information about the Department can be found at www.state.nj.us/dep/.

3.0 State Regulations Regarding AFOs/CAFOs

Administrative Code 7:14A-2.13, New Jersey Pollutant Discharge Elimination System (NJPDES), Specific Criteria for Concentrated Animal Feeding Operations, is administered through the New Jersey Department of Environmental Protection. Specific language from 7:14A-2.13 can be found at www.state.nj.us/dep/dwq/pdf/rulesgen.pdf.

4.0 Type of Permits

NPDES

New Jersey is authorized to administer the federal NPDES program.

5.0 Permit Coverage

The NJPDES requires all CAFOs, as defined in Title 40 of the Code of Federal Regulations (CFR), section 122.23 and 40 CFR 122 Appendix B, that discharge pollutants, to obtain a permit. Additionally, Administrative Code 7:14A-2.13 provides specific information for determining whether an animal feeding operation is concentrated.

6.0 Permit Conditions

Approvals

Site appraisal is required before development (NASDA, 1997).

Lagoon Design and Specifications

The state recommends following NRCS guidelines and BMPs.

Discharge Rules

No information was found in publicly available sources.

Waste Management Plans

No information was found in publicly available sources.

Separation Distances

No state standards for separation distances have been identified (local ordinances may apply) (NASDA, 1997).

Land Application Requirements

Liquid waste must be applied at agronomic rates.

7.0 Enforcement Information

Complaints and routine inspections identify violators (NASDA, 1997). New Jersey has not developed any formal CAFO inspection programs, although state staff have visited NPDES-permitted race tracks (USEPA 1998).

8.0 Voluntary Programs

New Jersey Department of Agriculture has a nonpoint source pollution program that provides assistance in agricultural conservation planning, using BMPs, and the development of conservation management plans (including animal waste nutrient management). Technical assistance and cost-sharing grants are available to help eligible landowners implement BMPs. The New Jersey Department of Agriculture also provides guidance concerning the application of organic materials (including animal waste) on agricultural lands. Management plans for land application of organic materials on farmlands may be developed for eligible farm operations. Assistance for these programs is provided at the local level through conservation districts. Conservation publications that provide information on managing animal waste and fertilizers are available (NJDA, 2000).

9.0 Additional State-Specific Information

Cooperative Extension Service

Although Rutgers Cooperative Extension offers programs on agricultural practices and maintaining an efficient balance between agriculture and the environment, its programs do not address CAFOs. Information about the extension can be found at www.rce.rutgers.edu/.

Comprehensive Nutrient Management Plan (CNMP) Certification

New Jersey does not have a CNMP preparers certification program.

Additional Information

New Jersey has not expended any significant time on the CAFO program (USEPA 1998).

10.0 References

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New York's CAFO Program

1.0 Background

Until 1995 permits were not issued to Concentrated Animal Feeding Operations (CAFOs) in New York because they were considered “no discharge” operations and not subject to the federal regulations regarding CAFOs. Therefore, agriculture was not defined as a point source until 1995. Since 1995 the number of large CAFOs with more than 1,000 animal units operating in New York has nearly doubled (NYDEC, 1999). As of July, 2001, there were 628 CAFOs permitted under General SPDES Permit GP-99-01. Of these 150 are large CAFOs with more than 1,000 animal units and 478 are medium CAFOs with 300 to 999 animal units. Virtually 100 percent of the large CAFOs and nearly 60 percent of medium CAFOs are covered under the permit program (Kaul, 2000). Almost 100 percent of New York's CAFOs are dairies (DiMura, 2000).

For blatant AFO dischargers, multiple mechanisms of enforcement, such as tickets or notices, have been developed (Kaul, 2000).

New York has developed a general State Pollutant Discharge Elimination System (SPDES) permit program that includes protection to groundwaters from point source discharges (NYDEC, 1999). The State has issued a 5-year general SPDES Permit for CAFOs effective July 1, 1999, and expiring June 30, 2004 (NYDEC, 1999).

In addition to New York's SPDES permit program, all AFOs are encouraged to participate in an Agricultural Environmental Management process. This program provides tools to help farmers address various water quality issues voluntarily (Kaul, 2000).

On July 12, 1999, a new law qualified large livestock operations for funding under the Agricultural Non Point Source Pollution Control and Abatement Program. This program helps to protect water quality by the implementation of best management practices on agricultural operations. The law helps to ensure clean water in New York by helping farmers who otherwise would be ineligible for funding (NY Office of the Governor, 1999).

2.0 Lead Regulatory Agency

New York Department of Environmental Conservation (NYDEC) is the lead regulatory agency regarding CAFOs in New York. NYSDEC information can be found at www.dec.state.ny.us/.

3.0 State Regulations Regarding AFOs/CAFOs

Within the State Environmental Conservation Law (ECL) is the State Pollutant Discharge Elimination System, SPDES (Chapter 10, Article 3). SPDES stipulates that no person shall discharge or cause a discharge of any pollutant without a SPDES permit. The regulation controls point source discharges to surface and ground waters. SPDES specifically describes prohibited discharges, how to apply for a permit, public notice requirements, provisions of SPDES permits, reissuance of permits, and monitoring of discharges. The specific language of this regulation can be found at www.dec.state.ny.us/website/regs/ch10.htm.

New York also has a SPDES permit specifically for CAFOs called the General State Pollutant Discharge Elimination System (SPDES) Permit for Concentrated Animal Feeding Operations

(CAFOs). This permit, also known as CAFO General Permit GP-99-01, covers all state CAFOs that apply for coverage. Facility-specific requirements are detailed in the required Agricultural Waste Management Plan. (NYDEC, 1999). Specific language from this regulation can be found at www.dec.state.ny.us/website/dow/package.pdf.

4.0 Types of Permits

NPDES

New York is authorized to administer the federal NPDES Program. The General State Pollutant Discharge Elimination System (SPDES) Permit for Concentrated Animal Feeding Operations (CAFOs) became effective July 1, 1999. The discharge permit is issued under DEC's State Pollution Elimination Discharge Permit Program, pursuant to the Environmental Conservation Law and the Clean Water Act (NYDEC, 1999).

5.0 Permit Coverage

The general permit covers facilities with 1,000 animal units or more and operations with 300 to 999 animal units that discharge into navigable waters through a man-made conveyance or directly to surface water. All CAFOs that apply for coverage will be covered by the general permit. Additionally, any AFO that meets the definition of a CAFO is eligible for coverage under the same general permit. Facilities with fewer than 300 animal units are not eligible for coverage under GP-99-01 (NYDEC, 1999).

NYDEC has prepared a three-step process for determining whether an AFO with 300 to 999 animal units is a CAFO. , Users first determine whether their facility is an animal feeding operation (AFO). If the facility is an AFO, the user determines the number of animal units in the AFO. If the facility has more than 1,000 animal units, it is a CAFO. If the facility has less than 300 animal units, it is not a CAFO. Those users with less than 300 animal units are referred to the Guide to Agricultural Environmental Management in New York State. This guide can be obtained by contacting the New York State Department of Agriculture and Markets at 1-800-554-4501, asking for Soil and Water Division. Users with 300 to 999 animal units determine if their AFO "discharges into navigable waters either through a man-made ditch, flushing system, or other similar man-made device, or directly into surface waters of the State" (NYDEC, 1999). For more specific information about making this determination, see the fact sheet (CAFO Fact Sheet No. 3 at www.dec.state.ny.us/website/dow/package.pdf.)

The following CAFOs are not covered by the general permit:

- CAFOs that the Department has determined, prior to the date of coverage, to be contributing to a violation of a water quality standard.
- CAFOs which have been notified by the Department to file for an individual SPDES permit.
- CAFOs that discharge all of their process wastewater to a publicly owned sanitary sewer system which discharges in accordance with an SPDES permit (NYDEC, 1999).

6.0 Permit Conditions

New York recently added a requirement to the General Permit to address agricultural waste

generated on CAFOs by requiring the development of a Comprehensive Nutrient Management Plan in accordance with NRCS standards (Kaul, 2000).

GP-99-01 does not dictate the specific technical requirements an animal feeding operation must meet. Rather, the technical specifications for waste handling operations will be developed by the operators and detailed in an Agricultural Waste Management Plan. The plan must be certified as adhering to NRCS standards before receiving approval (NYDEC, 1999).

Approvals

The Agricultural Waste Management Plan (AWMP) must be developed by a planner certified to prepare Comprehensive Nutrient Management Plans. The CAFO operator must submit a certification form to NYSDEC that is signed by both the CAFO operator and the certified planner who that developed the AWMP that has been developed in accordance with “NRCS Conservation Practice Standard 312-NY” within the deadlines specified in the General Permit. (The CAFO operator is notified of the AWMP compliance date in writing by NYSDEC at the time of permit coverage.)

Lagoon Design and Specification

Lagoon design and specification information can be obtained from NRCS Conservation Practice Standard (CPS) 313-NY for Waste Storage Facilities and NRCS CPS 359 for Waste Treatment Lagoons.

Discharge Rules

In accordance with existing NPDES CAFO regulations, New York’s general permit for CAFOs is a “zero-discharge” permit that allows no discharge to any natural surface water from the area of confinement, unless a 25-year, 24-hour storm event occurs. Operations must retain the 25-year, 24-hour storm runoff, but discharge during larger events is allowed (NYDEC, 1999).

Waste Management Plans

New York CRR, Title 6, Chapter 10, Article 3, requires that Agricultural Waste Management Plans (AWMP) for each CAFO facility covered by the New York State Pollutant Discharge Elimination System (SPDES) general permit for CAFOs be developed. The AWMP must be developed or reviewed by a qualified Agricultural Environmental Management (AEM) Planner. The permittee and the AEM Planner must certify that the AWMP was prepared in accordance with the “NRCS Conservation Practice Standard No. 312- NY.” The permittee must amend the AWMP prior to any changes that would affect the potential for discharge. The permittee and an AEM Planner must certify every 5 years (after the date of the initial AWMP) that the AWMP is in accordance with “NRCS Conservation Practice Standard No. 312 - NY” (NYDEC, 1999). The General Permit states that (NYDEC 2000a):

- Large existing or expanded facilities (1,000 animal units or more) shall develop and retain on-site a AWMP prepared by a qualified AEM planner within 18 months of the coverage under the SPDES permit
- Medium existing or expanded facilities (more than 300 and fewer than 1,000) shall develop and retain on-site a AWMP prepared by a qualified AEM planner within 24 months

- New facilities shall retain on-site and implement a certified AWMP upon the date of coverage under SPDES permit.

A list of certified planners provided by NYDEC can be found along with the General Permit at www.dec.state.ny.us/website/dow/package.pdf.

Separation Distances

New and expanded wastewater retention facilities must not be located in a 100-year flood plain unless the facility is protected from inundation and damage that may occur during the flood event (NYDEC, 1999).

Land Application Requirements

These requirements are specified in the AWMP prepared by each permitted facility (NYDEC, 1999).

Other

New facilities may not be built in State waters including wetlands (NYDEC, 1999).

7.0 Enforcement Information

General Enforcement Information

NYSDEC is developing Compliance Assurance Strategy for CAFOs that will be integrated with the program guidance on compliance and enforcement.

General Inspection Information

The permittee shall allow the Commissioner of the Department, the EPA Regional Administrator, or any duly authorized agent to enter the permittee's facility, to have access to any applicable records, to inspect any facilities, equipment, practices, or operations regulated under the permit, and to sample or monitor substances or parameters at any location (NYDEC, 1999).

Under State Law ECL Article 17, Title 8, anyone who violates a permit condition is subject to a civil penalty not to exceed \$25,000 per day for each violation (NYDEC, 1999).

Once the general permit is approved, an inspection schedule will be developed.

8.0 Voluntary Programs

The New York State Department of Agriculture and Markets (www.agmkt.state.ny.us/) is the lead agency for voluntary programs. The agency has instituted a program to train and qualify Agricultural Environmental Management Planners. This is one element of the AEM program, is an innovative process of tiered evaluation of environmental risks and development and implementation of best management practices to minimize or eliminate those risks.

The New York State Soil and Water Conservation Committee seeks to “develop and oversee

implementation of an effective agricultural nonpoint source water quality program for the state.” In cooperation with the Department of Agriculture and Markets, the Committee helps to administer the AEM program and to develop the New York “Guide to Agricultural Environmental Management in New York State.” More information about the committee, its programs, and its responsibilities can be found www.agmkt.state.ny.us/soilwater/home.html.

9.0 Additional State-Specific Information

Cooperative Extension Service

New York has a cooperative extension service at Cornell University, which helps build partnerships and coalitions with individuals, communities, organizations, government agencies, and businesses. More information about the Cornell University Cooperative Extension can be found at www.cce.cornell.edu/.

Comprehensive Nutrient Management Plan (CNMP) Certification

New York Department of Environmental Conservation, in partnership with NRCS, New York State Soil and Water Conservation District and Commission, Cornell Cooperative Extension, New York Department of Agriculture and Markets, Certified Crop Advisors, agricultural consultants, and farmers developed the Agricultural Environmental Management Planner Certification Program. This program qualifies Agricultural Environmental Management Planners (AWMPs). The New York Department of Agriculture and Markets, along with the USDA NRCS, is responsible for implementation of the certification program (NYDEC, 2000a).

An agricultural Environmental Management Planner is a planner deemed qualified by the Commissioner of Agriculture and Markets, in consultation with the State Soil and Water Conservation Committee, to develop and review AWMPs for concentrated animal feed operations (CAFOs) in New York State. To be certified as an Agricultural Environmental Planner, an individual must complete 5 hours of home study and take a 4-day training course. After the home study and training course, the first three AWMPs will be reviewed for adequacy. The USDA-NRCS will issue planner certificates. Continuing education programs are being developed (NYDEC, 2000a).

Five years after the date of the initial AWMP Certification, the permittee and a qualified AEM Planner shall re-certify in accordance with the Agricultural Waste Management Plan Five Year Re-Certification requirement. The re-certification states that the AWMP has been prepared in accordance with NRCS Conservation Practice Standard No. 312 - NY (NYDEC, 2000a).

10.0 References

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